RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/763,539
Source: I FWD
Date Processed by STIC: 11-30-04

ENTERED

IFWO

RAW SEQUENCE LISTING   DATE: 11/30/2004
PATENT APPLICATION: US/10/763,539   TIME: 12:09:55

          Input Set : A:\002010-854.ST25.txt
          Output Set: N:\CRF4\11302004\J763539.raw

```
 4 <110> APPLICANT: Karlik, Stephen J.
 5         Pleiss, Michael A.
 6         Konradi, Andrei W.
 7         Grant, Francine S.
 8         Semko, Christopher M.
 9         Dressen, Darren B.
10         Messersmith, Elizabeth
11         Freedman, Stephen
12         Yednock, Ted
14 <120> TITLE OF INVENTION: Composition for and Treatment of Demyelinating Diseases
15        and Paralysis By Administration of Remyelating Agents
17 <130> FILE REFERENCE: 002010-854
19 <140> CURRENT APPLICATION NUMBER: US 10/763,539
20 <141> CURRENT FILING DATE: 2004-01-26
22 <160> NUMBER OF SEQ ID NOS: 71
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 360
28 <212> TYPE: DNA
29 <213> ORGANISM: Homo sapiens
31 <220> FEATURE:
32 <221> NAME/KEY: CDS
33 <222> LOCATION: (1)...(360)
35 <400> SEQUENCE: 1
36 gtc aaa ctg cag cag tct ggg gca gag ctt gtg aag cca ggg gcc tca      48
37 Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala Ser
38  1               5                  10                  15
40 gtc aag ttg ttc tgc aca gct tct ggc ttc aac att aaa gac acc tat      96
41 Val Lys Leu Phe Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Thr Tyr
42              20                  25                  30
44 atg cac tgg gtg aag cag agg cct caa cag ggc ctg gag tgg att gga     144
45 Met His Trp Val Lys Gln Arg Pro Gln Gln Gly Leu Glu Trp Ile Gly
46          35                  40                  45
48 agg att gat cct gcg agt ggc gat act aaa tat gac ccg aag ttc cag     192
49 Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp Pro Lys Phe Gln
50      50                  55                  60
52 gtc aag gcc act att aca gcg gac acg tcc tcc aac aca gcc tgg ctg     240
53 Val Lys Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Ala Trp Leu
54  65                  70                  75                  80
56 cag ctc agc agc ctg aca tct gag gac act gcc gtc tac tac tgt gca     288
57 Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
58              85                  90                  95
60 gac gga atg tgg gta tca acg gga tat gct ctg gac ttc tgg ggc caa     336
```

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Input Set : A:\002010-854.ST25.txt
Output Set: N:\CRF4\11302004\J763539.raw

```
61 Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp Phe Trp Gly Gln
62           100                 105                 110
64 ggg acc acg gtc acc gtc tcc tca                                    360
65 Gly Thr Thr Val Thr Val Ser Ser
66           115                 120
69 <210> SEQ ID NO: 2
70 <211> LENGTH: 120
71 <212> TYPE: PRT
72 <213> ORGANISM: Homo sapiens
74 <400> SEQUENCE: 2
75 Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala Ser
76 1             5                   10                  15
77 Val Lys Leu Phe Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Thr Tyr
78           20                  25                  30
79 Met His Trp Val Lys Gln Arg Pro Gln Gln Gly Leu Glu Trp Ile Gly
80           35                  40                  45
81 Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp Pro Lys Phe Gln
82     50                  55                  60
83 Val Lys Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Ala Trp Leu
84 65                  70                  75                  80
85 Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
86           85                  90                  95
87 Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp Phe Trp Gly Gln
88           100                 105                 110
89 Gly Thr Thr Val Thr Val Ser Ser
90           115                 120
93 <210> SEQ ID NO: 3
94 <211> LENGTH: 318
95 <212> TYPE: DNA
96 <213> ORGANISM: Homo sapiens
98 <220> FEATURE:
99 <221> NAME/KEY: CDS
100 <222> LOCATION: (1)...(318)
102 <400> SEQUENCE: 3
103 agt att gtg atg acc cag act ccc aaa ttc ctg ctt gtt tca gca gga   48
104 Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
105 1             5                   10                  15
107 gac agg gtt acc ata acc tgc aag gcc agt cag agt gtg act aat gat   96
108 Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Thr Asn Asp
109           20                  25                  30
111 gta gct tgg tac caa cag aag cca ggg cag tct cct aaa ctg ctg ata  144
112 Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
113           35                  40                  45
115 tat tat gca tcc aat cgc tac act gga gtc cct gat cgc ttc act ggc  192
116 Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
117     50                  55                  60
119 agt gga tat ggg acg gat ttc act ttc acc atc agc act gtg cag gct  240
120 Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
121 65                  70                  75                  80
```

```
123 gaa gac ctg gca gtt tat ttc tgt cag cag gat tat agc tct ccg tac    288
124 Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Tyr
125          .          85                90                95
127 acg ttc gga ggg ggg acc aag ctg gag atc                            318
128 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
129             100             105
132 <210> SEQ ID NO: 4
133 <211> LENGTH: 106
134 <212> TYPE: PRT
135 <213> ORGANISM: Homo sapiens
137 <400> SEQUENCE: 4
138 Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
139 1               5                10                15
140 Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Thr Asn Asp
141             20                25                30
142 Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
143         35                40                45
144 Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
145     50                55                60
146 Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
147 65                70                75                80
148 Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Tyr
149             85                90                95
150 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
151             100             105
154 <210> SEQ ID NO: 5
155 <211> LENGTH: 429
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
159 <220> FEATURE:
160 <221> NAME/KEY: CDS
161 <222> LOCATION: (1)...(429)  .
163 <400> SEQUENCE: 5
164 atg gac tgg acc tgg agg gtc ttc tgc ttg ctg gct gta gca cca ggt    48
165 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly
166 1               5                10                15
168 gcc cac tcc cag gtc caa ctg cag gag tcc ggt gct gaa gtt gtt aaa    96
169 Ala His Ser Gln Val Gln Leu Gln Glu Ser Gly Ala Glu Val Val Lys
170             20                25                30
172 ccg ggt tcc tcc gtt aaa ctg tcc tgc aaa gct tcc ggt ttc aac atc    144
173 Pro Gly Ser Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Phe Asn Ile
174         35                40                45
176 aaa gac acc tac atg cac tgg gtt aaa cag cgt ccg ggt cag ggt ctg    192  .
177 Lys Asp Thr Tyr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu
178     50                55                60
180 gaa tgg atc ggt cgt atc gac ccg gct tcc ggt gac acc aaa tac gac    240
181 Glu Trp Ile Gly Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp
182 65                70                75                80
184 ccg aaa ttc cag gtt aaa gct acc atc acc gct gac gaa tcc acc tcc    288
```

RAW SEQUENCE LISTING   DATE: 11/30/2004
PATENT APPLICATION: US/10/763,539   TIME: 12:09:55

Input Set : A:\002010-854.ST25.txt
Output Set: N:\CRF4\11302004\J763539.raw

```
185 Pro Lys Phe Gln Val Lys Ala Thr Ile Thr Ala Asp Glu Ser Thr Ser
186                 85                  90                  95
188 acc gct tac ctg gaa ctg tcc tcc ctg cgt tcc gaa gac acc gct gtt    336
189 Thr Ala Tyr Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
190             100                 105                 110
192 tac tac tgc gct gac ggt atg tgg gtt tcc acc ggt tac gct ctg gac    384
193 Tyr Tyr Cys Ala Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp
194         115                 120                 125
196 ttc tgg ggt cag ggt acc acg gtc acc gtc tcc tca ggt gag tcc        429
197 Phe Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Glu Ser
198     130                 135                 140
202 <210> SEQ ID NO: 6
203 <211> LENGTH: 143
204 <212> TYPE: PRT
205 <213> ORGANISM: Homo sapiens
207 <400> SEQUENCE: 6
208 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly
209 1                 5                  10                  15
210 Ala His Ser Gln Val Gln Leu Gln Glu Ser Gly Ala Glu Val Val Lys
211             20                  25                  30
212 Pro Gly Ser Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Phe Asn Ile
213             35                  40                  45
214 Lys Asp Thr Tyr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu
215     50                  55                  60
216 Glu Trp Ile Gly Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp
217 65                  70                  75                  80
218 Pro Lys Phe Gln Val Lys Ala Thr Ile Thr Ala Asp Glu Ser Thr Ser
219                 85                  90                  95
220 Thr Ala Tyr Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
221             100                 105                 110
222 Tyr Tyr Cys Ala Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp
223         115                 120                 125
224 Phe Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Glu Ser
225     130                 135                 140
228 <210> SEQ ID NO: 7
229 <211> LENGTH: 383
230 <212> TYPE: DNA
231 <213> ORGANISM: Homo sapiens
233 <220> FEATURE:
234 <221> NAME/KEY: CDS
235 <222> LOCATION: (1)...(375)
237 <400> SEQUENCE: 7
238 atg ggt tgg tcc tgc atc atc ctg ttc ctg gtt gct acc gct acc ggt    48
239 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
240 1                 5                  10                  15
242 gtt cac tcc atc gtt atg acc cag tcc ccg gac tcc ctg gct gtt tcc    96
243 Val His Ser Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser
244             20                  25                  30
246 ctg ggt gaa cgt gtt acc atc aac tgc aaa gct tcc cag tcc gtt acc    144
```

RAW SEQUENCE LISTING   DATE: 11/30/2004
PATENT APPLICATION: US/10/763,539   TIME: 12:09:55

Input Set : A:\002010-854.ST25.txt
Output Set: N:\CRF4\11302004\J763539.raw

```
247 Leu Gly Glu Arg Val Thr Ile Asn Cys Lys Ala Ser Gln Ser Val Thr
248         35                  40                  45
250 aac gac gtt gct tgg tac cag cag aaa ccg ggt cag tcc ccg aaa ctg     192
251 Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu
252     50                  55                  60
254 ctg atc tac tac gct tcc aac cgt tac acc ggt gtt ccg gac cgt ttc     240
255 Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe
256 65                  70                  75                  80
258 tcc ggt tcc ggt tac ggt acc gac ttc acc ttc acc atc tcc tcc gtt     288
259 Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val
260                 85                  90                  95
262 cag gct gaa gac gtt gct gtt tac tac tgc cag cag gac tac tcc tcc     336
263 Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Asp Tyr Ser Ser
264             100                 105                 110
266 ccg tac acc ttc ggt ggt ggt acc aaa ctg gag atc taa ggatcctc       383
267 Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile   *
268             115                 120
271 <210> SEQ ID NO: 8
272 <211> LENGTH: 124
273 <212> TYPE: PRT
274 <213> ORGANISM: Homo sapiens
276 <400> SEQUENCE: 8
277 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
278 1               5                   10                  15
279 Val His Ser Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser
280             20                  25                  30
281 Leu Gly Glu Arg Val Thr Ile Asn Cys Lys Ala Ser Gln Ser Val Thr
282         35                  40                  45
283 Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu
284     50                  55                  60
285 Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe
286 65                  70                  75                  80
287 Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val
288                 85                  90                  95
289 Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Asp Tyr Ser Ser
290             100                 105                 110
291 Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
292             115                 120
295 <210> SEQ ID NO: 9
296 <211> LENGTH: 429
297 <212> TYPE: DNA
298 <213> ORGANISM: Homo sapiens
300 <220> FEATURE:
301 <221> NAME/KEY: CDS
302 <222> LOCATION: (1)...(429)
304 <400> SEQUENCE: 9
305 atg gac tgg acc tgg agg gtc ttc tgc ttg ctg gct gta gca cca ggt      48
306 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly
307 1               5                   10                  15
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 11/30/2004
PATENT APPLICATION: US/10/763,539   TIME: 12:09:56

Input Set : A:\002010-854.ST25.txt
Output Set: N:\CRF4\11302004\J763539.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:69; Xaa Pos. 32,33
Seq#:70; Xaa Pos. 106,120
Seq#:71; Xaa Pos. 115

VERIFICATION SUMMARY   DATE: 11/30/2004
PATENT APPLICATION: US/10/763,539   TIME: 12:09:56

Input Set : A:\002010-854.ST25.txt
Output Set: N:\CRF4\11302004\J763539.raw

```
L:1605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:16
L:1607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:32
L:1646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:96
L:1648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:112
L:1677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:112
```